

will be prohibited. The addition of new transmitters to these existing operations would constitute a new assignment in the 216-217 MHz band and would be inconsistent with the reallocation of this band. The addition of new transmitters for secondary telemetry operations in the 217-220 MHz band would be consistent with our reallocation of this band as long as no harmful interference is caused to primary licensees.<sup>168</sup> To the extent that primary status is necessary, however, operators would not be precluded from obtaining primary status by acquiring a license at auction for the 217-218 MHz Service or AMTS, or by negotiating with a licensee in the desired area.<sup>169</sup>

54. Fleetwood also expresses concern that our reallocation of this band will create uncertainty with regard to its "FCC certified equipment".<sup>170</sup> With regard to this concern, nothing in our reallocation of this band alters the regulatory or technical status of existing licensees' "FCC certified equipment". Our reallocation in this regard is technology-neutral and neither favors nor prejudices one manufacturer or technology over another.

55. In light of existing licensees operating throughout the 216-220 MHz band, the *Service Rules Notice* did not propose rule changes in this proceeding with regard to AMTS,<sup>171</sup> LPRS<sup>172</sup> or the 218-219 MHz service.<sup>173</sup> Rather, we sought comment on outstanding proposals from Data Flow, Securicor and Warren Havens. We received several comments regarding the licensing of this band and consider each proposal in Section IV.F.1, *infra*.

56. *1.4 GHz Band.* In the *Service Rules Notice*, we noted the secondary status of all incumbent telemetry operations licensed prior to adoption of final rules in this proceeding.<sup>174</sup> We requested comment on whether grandfathered secondary users in the 1429.5-1432 MHz band should have the option to request primary status prior to licensing new entrants to the band. In Appendix B of the *Service Rules Notice*, we included a list of all incumbents in the 1429.5-1432 MHz band.<sup>175</sup>

<sup>168</sup> As an aside, we note that this approach does not disturb our treatment of amateur stations participating in the 219-220 MHz band pursuant to our Part 97 rules. See 47 C.F.R. § 97.303, *et seq.*

<sup>169</sup> *Id.*

<sup>170</sup> *Id.*

<sup>171</sup> AMTS base stations are currently licensed on a site-by-site basis along U.S. coastlines and inland waterways. See Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Second Memorandum Opinion and Order and Fifth Report and Order*, FCC 02-74 at ¶ 23 (released April 8, 2002). See also Amendment of the Commission's Rules Concerning Maritime Communications; Petition for Rule Making filed by RegioNet Wireless License, LLC, PR Docket 92-257, *Fourth Report and Order and Third Further Notice of Proposed Rule Making*, PR 92-257, 15 FCC Rcd 22585 (2000) (proposing to transition the AMTS from site-by-site licensing to geographic service area licensing) (*AMTS Fourth R&O and Third NPRM*).

<sup>172</sup> 47 C.F.R. § 95.1009. The Low Power Radio Service operates on frequencies between 216-217 MHz. LPRS is a private, short-distance communication service providing auditory assistance to persons with disabilities, health care assistance for the ill, law enforcement tracking services in cooperation with law enforcement and point-to-point network control for AMTS coast stations. LPRS is licensed by rule under Part 95 of our Rules, therefore, no individual station license is needed for LPRS operations.

<sup>173</sup> The service rules for the 218-219 MHz Service were updated in the *218-219 MHz Order*. Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, WT Docket No. 98-169, 15 FCC Rcd 1497, 1499 ¶ 2 (1999) (*218-219 MHz Order*) (Recons. pending).

<sup>174</sup> See *Service Rules Notice*, 17 FCC Rcd at 2524-25 ¶ 60.

<sup>175</sup> *Id.* at 2563 Appendix B.

57. All commenters who discuss this issue state that incumbents should retain their secondary status. UTC states that incumbents are operating in remote locations where secondary status will not as a practical matter impact operations.<sup>176</sup> Itron states that incumbents should be permitted to continue operating as secondary users following adoption of service rules for the band.<sup>177</sup> Itron states that if a secondary user wishes to upgrade to primary status it should have to follow the same application procedures as new applicants.<sup>178</sup> In its reply comments, however, Itron changes its position and states that it would be inequitable to subject these incumbents to a risk of displacement by new, non-Governmental primary licensees.<sup>179</sup> Therefore, Itron states that incumbents should be given first priority.<sup>180</sup> We received no comments from incumbents in this band besides Itron.

58. Based on the record before us, we will retain the secondary status of grandfathered incumbents. They will neither "convert" to primary status nor be allowed to seek "conversion" to primary status before the new rules become effective. Rather, all entities who wish to operate primary telemetry systems in the 1429.5-1432 MHz band or in the "carve-out" areas in the 1427-1429 MHz and 1431.5-1432 MHz bands will be required to file an application on our Universal Licensing System after the effective date of final rules in this order. These applications will require frequency coordination.<sup>181</sup> We believe that the service rules we adopt today best implement the allocations designated for this band and will best accommodate the needs of all parties on an equal footing.

## **B. Application, Licensing and Processing Rules for New Services**

59. By this proceeding, we will assign initial licenses for terrestrial operations in the paired 1392-1395 MHz and 1432-1435 MHz bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz, and the 2385-2390 MHz bands, under a flexible licensing framework governed by our Part 27 rules, as modified, herein. Telemetry licenses in the 216-220 MHz and 1427-1432 MHz bands will be assigned under our Part 90 rules, as amended, herein.<sup>182</sup> AMTS licenses in the 217-218 MHz and 219-220 MHz bands will continue to be assigned under our Part 80 rules.<sup>183</sup> Licenses for the 218-219 MHz Service in the 218-219 MHz band will continue to be assigned under our Part 95 rules.<sup>184</sup> Licenses for LPRS in the 216-217 MHz band and WMTS in the 1427-1432 MHz band will also continue to be licensed by rule under our Part 95 rules.<sup>185</sup> We now turn our attention to the application, licensing, and processing rules we adopt for new terrestrial services.

### **1. Regulatory Status**

60. Background. In the *Service Rules Notice*, we tentatively concluded to adopt our Part 27 rules with regard to the regulatory status of services in the paired 1392-1395 MHz and 1432-1435 MHz

<sup>176</sup> UTC Comments at 8.

<sup>177</sup> Itron Comments at 7.

<sup>178</sup> *Id.*

<sup>179</sup> Itron Reply Comments at 6.

<sup>180</sup> *Id.*

<sup>181</sup> See discussion *infra* Section IV.B.8.

<sup>182</sup> 47 C.F.R. § 90.259.

<sup>183</sup> 47 C.F.R. § 80.385.

<sup>184</sup> See Subpart F of Part 95. 47 C.F.R. §§ 95.801-861.

<sup>185</sup> See Subpart G of Part 95 for LPRS and Subpart H of Part 95 for WMTS. 47 C.F.R. §§ 95.1001-1019 and §§ 95.1101-1129.

bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands.<sup>186</sup> The flexible licensing framework of our Part 27 rules permits a licensee to provide a combination of services under more than one regulatory status in a single license.<sup>187</sup> The licensee will be able to provide potentially a variety of services anywhere within its licensed area at any time, consistent with its regulatory status.

61. We proposed to permit applicants to request common carrier status as well as non-common carrier status for authorization in a single license, rather than to require the applicant to choose between common carrier and non-common carrier services.<sup>188</sup> We stated that a licensee would be required to indicate a regulatory status based on any services they choose to provide. Apart from this designation of regulatory status, we would not require applicants to describe the services they seek to provide.<sup>189</sup> In providing guidance on this issue to applicants, the Commission pointed out that an election to provide service on a common carrier basis requires that the elements of common carriage be present;<sup>190</sup> otherwise, the applicant must choose non-common carrier status.<sup>191</sup> We sought comment on this proposal. We also proposed that if a licensee were to change the service or services it offers, such that its regulatory status would change, the licensee must notify the Commission.<sup>192</sup> Although a change in a licensee's regulatory status would not require prior Commission authorization, we proposed that a licensee be required to notify the Commission within 30 days of the change.<sup>193</sup>

62. Discussion. Although no commenter objects to our proposal regarding a flexible approach, at least one commenter agrees that our proposal to adopt Part 27 of our rules would enhance the overall efficiencies in the licensing and administrative process of this spectrum.<sup>194</sup> Accordingly, because we believe that a broad licensing framework will encourage licensees to develop new and innovative services with minimal regulatory restraint, we are adopting our proposal. Under the flexible regulatory approach we are adopting, licensees in the subject bands will be permitted to provide any combination of services anywhere within their licensed areas at any time, consistent with the regulatory status specified by the licensee on its FCC Form 601 (*i.e.*, common carrier and/or non-common carrier) and with applicable interference protection requirements. To fulfill our enforcement obligations and to ensure the compliance with the statutory requirements of Titles II and III of the Communications Act, we will require all licensees, except band managers, to identify the regulatory status of the service(s) they intend

<sup>186</sup> *Service Rules Notice*, 17 FCC Rcd at 2531 ¶ 78.

<sup>187</sup> See 47 C.F.R. § 27.10(a).

<sup>188</sup> See *WCS Report and Order*, 12 FCC Rcd at 10846, 10848 ¶¶ 119, 122.

<sup>189</sup> See *id.* at 10848 ¶ 121; see also Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and Fixed Satellite Services, CC Docket No. 92-297, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 12545, 12644 ¶ 223 (1997) (*LMDS Second Report and Order*); 47 C.F.R. § 101.1013.

<sup>190</sup> See 47 U.S.C. § 153(44) ("A telecommunications carrier shall be treated as a common carrier under this Act ..."); see also 47 U.S.C. § 332(C)(1)(A) ("A person engaged in the provision of a service that is a commercial mobile service shall, insofar as such person is so engaged, be treated as a common carrier for purposes of this Act ...").

<sup>191</sup> *WCS Report and Order*, 12 FCC Rcd at 10790-91 ¶ 121. The Commission examined services in the *LMDS Second Report and Order* and explained that any video programming service would be treated as a non-common carrier service. *LMDS Second Report and Order*, 12 FCC Rcd at 12639-41 ¶¶ 213-215.

<sup>192</sup> See 47 C.F.R. § 27.66 (a)-(b).

<sup>193</sup> *Service Rules Notice*, 17 FCC Rcd at 2532 ¶ 80.

<sup>194</sup> See ArrayComm Comments at 3; InsideTrax Comments at 5 and AeroAstro Comments at 4 supporting adoption of Part 27 for the 1670-1675 MHz band. See also Spacelabs Comments at 4; LMCC Comments at 7 and Philips Reply Comments 2 supporting adoption of Part 27 for the paired 1392-1395 MHz and 1432-1435 MHz band.

to provide.<sup>195</sup> Consistent with Section 27.10 of the Commission's Rules, licenses in the subject bands will not be required to describe their particular services, but only to designate the regulatory status of the service(s).<sup>196</sup> Licensees will also be required to notify the Commission within 30 days of service changes that alter their regulatory status.<sup>197</sup> We note, however, that a different time period may apply, as determined by the Commission, where the change results in the discontinuance, reduction, or impairment of the existing service.<sup>198</sup> Thus, under the framework we are adopting pursuant to our Part 27 rules, licensees in the paired 1392-1395 MHz and 1432-1435 MHz bands, and in the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands will be authorized to provide a variety or combination of fixed, mobile, common carrier, and non-common carrier services.

## 2. Eligibility; Foreign Ownership Restrictions

63. Background. In the *Service Rules Notice*, we stated that by opening this spectrum to as wide a range of applicants as possible, we would encourage entrepreneurial efforts to develop new technologies and services, while helping to ensure efficient use of this spectrum.<sup>199</sup> We sought comment on whether open eligibility poses a significant likelihood of substantial competitive harm in specific markets, and, if so, whether eligibility restrictions are an effective method to address that harm.<sup>200</sup> We proposed that there be no restrictions on eligibility for a license, other than the foreign ownership restrictions set forth in Section 310 of the Communications Act.<sup>201</sup>

64. Sections 310(a) and 310(b) of the Communications Act, as modified by the Telecommunications Act of 1996, impose foreign ownership and citizenship requirements that restrict the issuance of licenses to certain applicants.<sup>202</sup> We also noted that Section 27.12 of the Commission's Rules, which implements Section 310 of the Act,<sup>203</sup> would by its terms apply to applicants for licenses in the bands subject to this proceeding.<sup>204</sup> In this connection, we sought comment on our proposal that under Part 27 of our rules, common carriers and non-common carriers should not be subject to varied reporting obligations.

65. Discussion. The use of eligibility restrictions can be an effective tool to ensure that spectrum does not become concentrated in the hands of incumbent monopolists.<sup>205</sup> ArrayComm states that the 1670-1675 MHz band in particular does not pose a situation to warrant eligibility restrictions.<sup>206</sup> We agree, and we also believe that an open licensing eligibility framework will encourage investment in all the bands subject to this proceeding and thus will promote the public interest. We further believe that

<sup>195</sup> See discussion *supra* Section IV.A.5.

<sup>196</sup> 47 C.F.R. § 27.10.

<sup>197</sup> See 47 C.F.R. § 27.66 (a)-(b). A change in regulatory status would require Commission prior authorization, however, if the change raised issues concerning the benchmark contained in Section 310(b)(4) of the Act.

<sup>198</sup> See 47 C.F.R. § 27.66 (a)-(b).

<sup>199</sup> *Service Rules Notice*, 17 FCC Rcd at 2532 ¶¶ 81-82.

<sup>200</sup> *Id.*

<sup>201</sup> See 47 U.S.C. § 310(a), (b), and (d).

<sup>202</sup> 47 U.S.C. §§ 310(a), 310(b).

<sup>203</sup> 47 C.F.R. § 27.12. See also Section 27.302 of the Commission's Rules, 47 C.F.R. § 27.302.

<sup>204</sup> See 47 C.F.R. § 27.12.

<sup>205</sup> See ArrayComm Comments at 10-11.

<sup>206</sup> *Id.*

this approach will promote economic opportunity and competition in the paired 1392-1395 MHz and 1432-1435 MHz bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz, and the 2385-2390 MHz bands.

66. Additionally, because we are adopting a flexible approach to regulatory status, as discussed above, all licensees will be subject to the same requirements to file changes in foreign ownership information to the extent required by our Part 27 rules. In the filing of an application under the proposed service rules, we do not believe that common carriers and non-common carriers should be subject to varied reporting obligations. EDS claims that our proposal places an inappropriate foreign ownership reporting requirement on license applicants not subject to Section 310(b) of the Communications Act, 47 U.S.C. § 310(b).<sup>207</sup> As support, EDS cites to a public notice announcing modification to Part 25 of our rules and the introduction of FCC Form 312.<sup>208</sup> EDS's comment, however, is misplaced and we take this opportunity to clarify the issue.

67. This proceeding concerns the assignment of licenses for terrestrial operations as governed by Part 27 of our rules.<sup>209</sup> We do not consider the licensing of non-terrestrial (satellite) services in this proceeding. Under Part 27 of our rules, licensees are able to provide broadcast, common carrier, and non-common carrier services. Further, to the extent required by our Part 27 rules, all subject licensees, even non-common carriers, must report alien ownership on a consistent basis, to better enable the Commission to monitor compliance.<sup>210</sup> By establishing parity in reporting obligations, however, we do not propose a single, substantive standard for compliance. Thus, by way of example, we do not and would not disqualify an applicant requesting authorization exclusively to provide non-common carrier and non-broadcast services under a license simply because its citizenship information would disqualify it from a common carrier or broadcast license. Because we find the reporting requirements and unrestricted eligibility requirements we adopt in this proceeding to be consistent with Commission policy and appropriate for the flexible service uses we envision in this proceeding, we adopt our proposal to allow open eligibility in the Government transfer bands that will be governed under Part 27 of our rules.

### 3. License Term and Renewal Expectancy

68. Background. In the *Service Rules Notice*, we sought comment on the license term and renewal expectancy requirements for new licensees in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands.<sup>211</sup> We proposed a license term of 10 years, with a renewal expectancy similar to that afforded broadband PCS and cellular licensees. We stated that we believed a 10-year license term, combined with renewal expectancy, would help to provide a stable regulatory environment that would be attractive to investors and, thereby, encourage development of this frequency band.<sup>212</sup> We also sought comment on whether a license term longer than 10 years would be appropriate to achieve these goals and better serve the public interest. While we indicated an initial preference for a substantial service requirement, we also invited comment

<sup>207</sup> EDS Comments at 1-3.

<sup>208</sup> *Id.* citing Implementation of New Part 25 Regulations for Satellite Space and Earth Station Application and Licensing Procedures, *Public Notice*, DA 97-1967 (rel. September 16, 1997).

<sup>209</sup> MSS Feeder Uplinks and Downlinks are contingent on the adoption of an international allocation and other conditions. See 47 C.F.R. § 2.106, footnote US368; *Reallocation Report and Order*, 17 FCC Rcd at 392 ¶ 52.

<sup>210</sup> See *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, GN Docket No. 01-74, *Report and Order*, 17 FCC Rcd 1022, 1074 n.376 (2002).

<sup>211</sup> *Service Rules Notice*, 17 FCC Rcd at 2534 ¶ 86.

<sup>212</sup> *Id.*

on whether a build-out requirement would be more appropriate for service licensed under Part 27 of our rules.<sup>213</sup> In addition, we proposed that on the renewal application licensees must, at a minimum, include specific showings in order to claim renewal expectancy.<sup>214</sup>

69. Discussion. Based on the record in this proceeding,<sup>215</sup> we adopt a ten-year license term, in conjunction with a renewal expectancy based on substantial service.<sup>216</sup> Hence, a renewal applicant shall receive a preference or renewal expectancy if the applicant has provided substantial service during its previous license term and has complied with the Communications Act and Commission rules and policies.<sup>217</sup> We have made significant efforts to establish consistency and promote regulatory parity with respect to policies governing the wireless services.<sup>218</sup> In other contexts, we have recognized the advantages that a ten-year license term and renewal expectancy based on a substantial service requirement affords nascent providers and, thus, endorsed this approach.<sup>219</sup> Similarly, we believe that adopting a requirement that licensees make a showing of substantial service at renewal in order to acquire an expectancy will further the public interest.<sup>220</sup>

70. The renewal application of a licensee in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands<sup>221</sup> must include, at a minimum, the following showings in order to claim a renewal expectancy:<sup>222</sup>

- A description of current service in terms of geographic coverage and population served or links installed and a description of how the service complies with the substantial service requirement.
- Copies of any Commission Orders finding the licensee to have violated the Communications Act or any Commission rule or policy, and a list of any pending

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<sup>213</sup> *Id.* at 2536 ¶ 94.

<sup>214</sup> *Id.* at 2534 ¶ 87.

<sup>215</sup> See ArrayComm Comments at 13; InsideTrax at 7. *But see* AeroAstro Comments at 6 (requesting a twenty-year licensing period because of the time delays involved with spacecraft construction).

<sup>216</sup> Incumbent licensees that currently have a license term of less than ten years will receive a ten-year term upon renewal.

<sup>217</sup> See 47 C.F.R. § 24.14(c).

<sup>218</sup> See, e.g., *LMDS Second Report and Order*, 12 FCC Rcd at 12545; *39 GHz MO&O*, 14 FCC Rcd 12428; *218-219 MHz Report and Order* at 1497.

<sup>219</sup> See *39 GHz Report and Order*, 12 FCC Rcd 18600, 18623; Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket 97-81, *Report and Order*, 15 FCC Rcd 11956, 11995 ¶ 95 (2000) (*MAS Report and Order*).

<sup>220</sup> See discussion *infra* Section IV.4. – Performance Requirements.

<sup>221</sup> Because our Part 27 rules will not apply to services operating in the 216-220 MHz and 1427-1432 MHz bands, licensees in these bands must comply with the specific rules applicable to the services under which they are authorized to operate. See *supra* ¶¶ 12, 37.

<sup>222</sup> See 47 C.F.R. §§ 27.14(c)(1)-(4); see also 47 C.F.R. § 101.1011 (LMDS context). We will address the issue of whether use of the spectrum for MSS feeder links would meet the substantial service requirement in any subsequent proceeding adopting service rules for the 1390-1392 MHz band.

proceedings that relate to any matter described by the requirements for the renewal expectancy.<sup>223</sup>

- A description of how the licensee has complied with the substantial service requirement, including an explanation of its expansion and a timetable for new construction to meet changes in demand for service.

71. These requirements are in the public interest because these showings will ensure that the licensee is using the spectrum efficiently to provide services to the public, has operated its facilities in compliance with the Commission's rules, and has the requisite qualifications to be a Commission licensee. For similar reasons, we also adopt these rules with respect to band managers under Part 27 of our rules.<sup>224</sup> We also adopt our proposal that if a license is partitioned or disaggregated, any partitionee or disaggregatee would be authorized to hold its license for the remainder of the partitioner's or disaggregator's original license term.<sup>225</sup> Because we do not believe that a licensee, either by partitioning or disaggregation, should be able to confer greater rights than it was awarded under the terms of its initial license grant, a partitionee or disaggregatee must also demonstrate that it has met the substantial service requirements in any renewal application. This approach is similar to the partitioning provisions the Commission adopted in other services.<sup>226</sup>

#### 4. Performance Requirements

72. Background. We sought comment on whether licensees in the paired 1392-1395 MHz and 1432-1435 MHz bands and unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands should be subject to a substantial service requirement or a minimum coverage requirement as a condition of license renewal.<sup>227</sup> We noted that the Commission has imposed such requirements on licensees in other services to ensure that spectrum is used effectively and service is implemented promptly.<sup>228</sup> Accordingly, we sought comment on whether licensees should be required to provide "substantial service" to the geographic license area within ten years or any other license term which we adopt for this service.<sup>229</sup> The Commission has defined substantial service as "service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal."<sup>230</sup> Further, we sought comment on whether there should be a construction requirement as an alternative, safe harbor

<sup>223</sup> See 47 C.F.R. §§ 22.940(a)(2)(i)-(iv).

<sup>224</sup> See 47 C.F.R. §§ 27.14(c), 27.607(a)-(d).

<sup>225</sup> See 47 C.F.R. § 27.15(a)-(b).

<sup>226</sup> See Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services, *Report and Order*, WT Docket No. 99-327, 15 FCC Rcd 16934 (2000) (Fixed Services at 24 GHz); Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service, *Report and Order*, 10 FCC Rcd 9589, 9614 ¶ 46 (1995) (MDS); Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensees and Implementation of Section 257 of the Communications Act – Elimination of Market Barriers, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 96-1148, 11 FCC Rcd 21831, 21870 ¶¶ 76-77 (1996) (*Partitioning and Disaggregation Report and Order*) (Broadband PCS).

<sup>227</sup> *Service Rules Notice*, 17 FCC Rcd at 2536-37 ¶¶ 94-95.

<sup>228</sup> Cf. Section 22.940(a)(2)(I) through Section 22.940(a)(2)(iv) of the Commission's Rules, 47 C.F.R. §§ 22.940(a)(2)(i)-(iv).

<sup>229</sup> See *LMDS Second Report and Order*, 12 FCC Rcd at 12659 ¶¶ 263-267.

<sup>230</sup> See, e.g., 47 C.F.R. § 22.940(a)(1)(i); 47 C.F.R. § 27.14(a).

standard.<sup>231</sup> Under the safe harbor, the licensee would be required to reach a minimum of one-third of the population in its licensed area, no later than the mid-point of the license term and two-thirds of the population by the end of the license term.<sup>232</sup> We also sought comment on whether, in the event that a license is partitioned or disaggregated, a partitionee or disaggregatee should be bound by the standard (either substantial service or a construction requirement) that we may adopt in this proceeding.<sup>233</sup>

73. Additionally, as a matter of enforcement against non-compliant licensees, we asked whether the license should be subject to termination automatically.<sup>234</sup> Thus, we sought comment on whether to adopt an automatic cancellation standard or termination only upon action by the Commission.<sup>235</sup> If a geographic area licensee were to lose its license for failure to comply with the performance requirements we are adopting in this proceeding, we also asked whether the licensee should be prohibited from bidding on the geographic area license for the same territory in the future.<sup>236</sup>

74. Discussion. We believe, and the comments support, a performance requirement based on a substantial service showing for the paired 1392-1395 MHz and 1432-1435 MHz bands and the unpaired 1390-1392 MHz, 1670-1675 MHz and 2385-2390 MHz bands.<sup>237</sup> Compared to a construction standard, a substantial service requirement will provide licensees greater flexibility to determine how best to implement their business plans based on criteria demonstrating actual service to end users, rather than on a showing of whether a licensee passes a certain proportion of the relevant population. We also believe that this standard is less burdensome than the alternative proposed by AeroAstro. Under AeroAstro's proposal, a "substantial progress toward providing service" test would be employed, requiring the licensee to satisfy several "benchmarks".<sup>238</sup> We believe that the approach AeroAstro proposes would be impractical and cumbersome to administer.

75. We also adopt our definition of substantial service as "a service that is sound, favorable, and substantially above a level of mediocre service which might minimally warrant renewal."<sup>239</sup> As a result of the flexibility that this standard affords, we have, in past proceedings, provided safe harbor examples to provide guidance to licensees in meeting this requirement. In determining whether a licensee has provided substantial service at the end of the license term, we will consider factors such as: i) whether the licensee's operations service niche markets or focus on serving populations outside of areas serviced by other licensees; ii) whether the licensee's operations serve populations with limited access to telecommunications services; and iii) a demonstration of service to a significant portion of the population or land area of the licensed area. We emphasize that this list is not exhaustive and that the substantial service requirement can be met in other ways. Hence, we will review licensees' showings on a case-by-case basis. If a licensee fails to meet the performance requirement, the subject license will not be renewed. We also note that under Part 27 of our rules, as amended, band managers are subject to our

<sup>231</sup> *Service Rules Notice*, 17 FCC Rcd at 2537 ¶ 95.

<sup>232</sup> *Id.*

<sup>233</sup> *Id.*

<sup>234</sup> *Id.*

<sup>235</sup> *Id.*

<sup>236</sup> *Id.*

<sup>237</sup> See *ArrayComm Comments* at 18.

<sup>238</sup> *AeroAstro Comments* at 7.

<sup>239</sup> 47 C.F.R. § 27.14(a). See also *WCS Report and Order*, 12 FCC Rcd at 10843-44; *218-219 MHz Service Report and Order*, 15 FCC Rcd at 1537-38; *MAS Report and Order*, 15 FCC Rcd at 11994 ¶ 94.

performance requirements specified in Section 27.14 of the Commission's Rules.<sup>240</sup> Under the flexible licensing framework we adopt herein, we will require licensees to establish a substantial performance showing at renewal.<sup>241</sup> We believe that this approach furthers the public interest and is consistent with our renewal requirements, as discussed above, ensuring efficient use of the spectrum, and expeditious service to the public.

## 5. Application of Title II Requirements to Common Carriers

76. Background. In the *Service Rules Notice*, we noted our forbearance authority pursuant to Section 10 of the Communications Act and considered the extent to which we should apply Title II requirements to common carriers in this context.<sup>242</sup> We sought comment on whether we should forbear from enforcing any provisions of the Communications Act of 1934, as amended or the Commission's Rules with regard to common carrier licensees operating in the paired 1392-1395 MHz and 1432-1435 MHz bands or the unpaired 1390 MHz, 1670-1675 MHz and 2385-2390 MHz bands.<sup>243</sup> Section 10 directs the Commission to forbear from applying any regulation or provision of the Act to a telecommunications carrier or service, or class of telecommunications carriers or services if a three-prong test is met.<sup>244</sup>

77. Discussion. Only one party filed comment on this issue for any of the bands captioned in this proceeding. ArrayComm states that the Commission should exercise "full forbearance" of the Title II requirements with regard to the 1670-1675 MHz band.<sup>245</sup> Specifically, ArrayComm asserts that, in addition to applying forbearance to sections 203, 204, 205, 211 and 212 of the Act, the Commission should also adopt forbearance from applying the nondiscrimination requirements of sections 201 and 202 of the Act.<sup>246</sup> Because the Commission has, pursuant to its authority under section 332(c)(1)(A),<sup>247</sup> already exercised forbearance with respect to sections 203, 204, 205, 211, 212, and most of the

<sup>240</sup> 47 C.F.R. § 27.14.

<sup>241</sup> See e.g., *39 GHz Report and Order*, 12 FCC Rcd 18600, 18625 ¶ 47.

<sup>242</sup> *Service Rules Notice*, 17 FCC Rcd at 2535 ¶ 96.

<sup>243</sup> *Service Rules Notice*, 17 FCC Rcd at 2537 ¶ 96. Because the licensing and service rules for 216-217 MHz band, 218-219 MHz band, 1429.5-1432 MHz band and the paired 217-218 MHz and 219-220 MHz bands have been established previously in other proceedings, we do not consider forbearance with regard to these bands.

<sup>244</sup> See 47 U.S.C. § 160(a) and (b). Section 10 requires forbearance if we determine that:

- (1) enforcement of such regulation or provision is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;
- (2) enforcement of such regulation or provision is not necessary for the protection of consumers; and
- (3) forbearance from applying such provision or regulation is consistent with the public interest.

47 U.S.C. § 160(a).

<sup>245</sup> ArrayComm Comments at 16.

<sup>246</sup> See 47 U.S.C. §§ 201, 202, 203, 204, 205, 211, 212.

<sup>247</sup> 47 U.S.C. § 332(c)(3).

applications of section 214, we believe that the substance of ArrayComm's request already has been sufficiently addressed and need not be reinstated here.<sup>248</sup> Consequently, to the extent a prospective licensee in the paired 1392-1395 MHz and 1432-1435 MHz bands or in the unpaired 1390-1392 MHz, 1670-1675 MHz, and the 2385-2390 MHz bands offers Commercial Mobile Radio Services (CMRS), we will exercise forbearance accordingly. But we find no basis to exercise forbearance from these or any other provisions of the Act at this time for services other than CMRS in the absence of a separate and independent showing that satisfies the public interest requirements of section 10 of the Act.<sup>249</sup>

78. Arraycomm also seeks forbearance of sections 201 and 202 of the Act. Under sections 201 and 202, carriers must furnish services upon reasonable request; carriers must establish physical connections with other carriers in accordance with orders of the Commission; and carriers' rates and practices must be just, reasonable, and non-discriminatory.<sup>250</sup> As ArrayComm notes, the Commission previously declined to forbear from applying section 201 and 202 of the Act for CMRS.<sup>251</sup>

79. ArrayComm states that that a distinction can be drawn between the reasons underlying the Commission's decision not to forbear in the case of CMRS and the platform ArrayComm proposes to implement for the 1670-1675 MHz band.<sup>252</sup> Specifically, ArrayComm states that its proposed service offering in this band would focus on a data-centric-based, wireless Internet access service as opposed to a traditional circuit-switched wireless voice service like CMRS.<sup>253</sup> ArrayComm also alleges that it may also utilize this spectrum for services with public safety applications.<sup>254</sup> Thus, ArrayComm concludes that because the potential use of this band would not likely harm consumers, enforcement of sections 201 and 202 of the Act would be unnecessary.<sup>255</sup>

80. Because the 1670-1675 MHz band is subject to initial licensing pursuant to the rules implemented in this proceeding, we decline to address the merits of ArrayComm's request for forbearance from Sections 201 and 202 as premature. Our consideration of any request for forbearance, as a general matter, is technology-neutral and therefore does not turn on the asserted qualitative merits of a proponent's technology. Accordingly, our decision here does not make any determination or opinion otherwise on ArrayComm's statements with regard to its "data-centric-based" technology.

## 6. Partitioning and Disaggregation

81. **Background.** With regard to those bands we propose to license by geographic area, we sought comment on allowing licensees to partition their service areas and to disaggregate their spectrum.<sup>256</sup> We stated that Section 27.15 of the Commission's Rules<sup>257</sup> would apply if we are to allow

<sup>248</sup> *Second CMRS Report and Order*, 9 FCC Rcd at 1478-81, 1485, 1510-11 ¶¶173-182, 196, 272.

<sup>249</sup> See *infra*, note 251.

<sup>250</sup> 47 U.S.C. §§ 201, 202. See also 47 C.F.R. § 603(a), (b).

<sup>251</sup> *Id.* citing Implementation of Sections 3(n) and 332 of the Communications Act, GN Docket No. 93-252, *Second Report and Order*, 9 FCC Rcd 1411, 1463-93 ¶¶ 124-219 (1994) (*CMRS Second Report and Order*), *recon. dismissed in part and denied in part*, 15 FCC Rcd 5231 (2000); see also 47 C.F.R. § 20.15.

<sup>252</sup> ArrayComm Comments at 17-18.

<sup>253</sup> *Id.* at 15 fn. 52.

<sup>254</sup> *Id.* at 17.

<sup>255</sup> *Id.*

<sup>256</sup> "Partitioning" is the assignment of geographic portions of a license along geopolitical or other boundaries. "Disaggregation" is the assignment of discrete portions of "blocks" of spectrum licensed to a geographic licensee or (continued....)

partitioning and disaggregation. Section 27.15 provides that licensees may apply to partition their licensed geographic service areas or disaggregate their licensed spectrum at any time following the grant of their licenses.<sup>258</sup> In the *Service Rules Notice*, we sought comment on the benefits and costs of this approach, and whether it would promote the public interest.

82. Discussion. Because we continue to believe that partitioning and disaggregation will enhance the spectrum's versatility, we adopt our proposals in the *Service Rules Notice* as applied to the paired 1392-1395 MHz and 1432-1435 MHz bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz, and the 2385-2390 MHz bands.<sup>259</sup> We also adopt the unjust enrichment provisions<sup>260</sup> as well as the remaining provisions governing partitioning and disaggregation set forth in Section 27.15 of our rules.

83. As we state above, any partitionee or disaggregatee is authorized to hold its license for the remainder of the original licensee's (*i.e.*, partitionor or disaggregator) license term and a demonstration must be made that the applicable performance requirements have been met for the partitioned area or disaggregated spectrum at the time of renewal.<sup>261</sup> However, we have determined that participants to a partitioning agreement should be permitted to negotiate whether one party or both will be responsible for compliance with these requirements. We conclude that this approach is appropriate because it will "ensure that licensees have the flexibility to structure their business plans while ensuring that partitioning not be used as a vehicle to circumvent the applicable construction requirements."<sup>262</sup> Thus, parties will be given two options to meet the substantial service construction requirement. Under the first option the parties to the partitioning agreement would certify that they would each separately satisfy the substantial service requirement for their portion of the service area.<sup>263</sup> If either party fails to meet the substantial service requirement by the end of the license term, then the non-performing licensee's authorization would be subject to termination at the end of the initial license term.<sup>264</sup> Under the second option, the original licensee or partitionor certifies that it has met or will meet the substantial service requirement for the entire service area during the license term. If the original licensee fails to make the required showing, then this licensee's authorization will be subject to termination, but the partitionee's license will not be affected by this termination.<sup>265</sup>

84. We also conclude that parties to a disaggregation agreement should be given the flexibility to determine which party will assume responsibility for complying with our construction requirements in regard to the disaggregated portion of the license.<sup>266</sup> As with partitioning agreements,

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(...continued from previous page)

qualifying entity. Disaggregation allows for multiple transmitters in the same area operated by different companies (thus the possibility of harmful interference increases).

<sup>257</sup> 47 C.F.R. § 27.15.

<sup>258</sup> *WCS Report and Order*, 12 FCC Rcd at 10836-39 ¶¶ 96-103.

<sup>259</sup> *ArrayComm Comments* at 14-15; *Data Flow Comments* at 5.

<sup>260</sup> 47 C.F.R. § 27.15(c)(1)(2); *see also* 47 C.F.R. § 1.2111.

<sup>261</sup> *See* 47 C.F.R. § 27.15(d); *see also supra* ¶¶ 67-70.

<sup>262</sup> *See, e.g., LMDS Fourth Report and Order*, 13 FCC Rcd at 11664-65 ¶ 16.

<sup>263</sup> *See* 47 C.F.R. § 27.15(e)(1); *see, e.g., PCS Order*, 11 FCC Rcd at 21855; *LMDS Report and Order*, 13 FCC Rcd at 11665 ¶ 16.

<sup>264</sup> *See* 47 C.F.R. § 27.15(e)(1); *see, e.g., LMDS Report and Order*, 13 FCC Rcd at 11665 ¶ 16.

<sup>265</sup> *See* 47 C.F.R. § 27.15(e)(1).

<sup>266</sup> *See* 47 C.F.R. § 27.15(e)(2).

parties must certify whether one licensee will fulfill the applicable requirements or whether the parties will share responsibility.<sup>267</sup> In addition, we will permit licensees to enter into combined partitioning and disaggregation agreements. As we have stated in the past, we believe that offering this option will promote spectral efficiency.<sup>268</sup>

85. We consider partitioning and disaggregation to be a form of license assignment that will require prior Commission approval, unless pro-forma in nature.<sup>269</sup> Therefore, a licensee will be required to file a standard application for approval of assignment on a FCC Form 603.<sup>270</sup> We note that if a licensee has negotiated via frequency coordination agreement with another licensee, such agreement shall remain in effect on all parties regardless of an assignment or partitioning and/or disaggregation arrangements unless a new agreement is reached. In effect, the frequency coordination agreement will convey with the license. Finally, licensees who receive bidding credits at auction and subsequently seek to partition or disaggregate their spectrum holding(s) will be subject to the unjust enrichment provisions contained in Section 1.2111(e) of our Rules.<sup>271</sup>

## 7. Individual Station Licenses

86. **Background.** As a general matter, under geographic area licensing framework, the licensee has exclusive use to operate within its geographic service area. Thus, a geographic area licensee may operate freely within its licensed service area, subject to any applicable technical specifications, without having to file a separate application for each individual station site added, removed or otherwise modified, within its service area. Nonetheless, in the *Service Rules Notice*, we indicated that there might be situations in which we should require licensees to obtain an individual station license for a particular station within their geographic service area.<sup>272</sup> We indicated that licensees should be required to apply for an individual station license to the Commission for those stations that (1) require submission of an Environmental Assessment under Section 1.1307 of our rules;<sup>273</sup> (2) require international coordination;<sup>274</sup> (3) would operate in the quiet zones listed in Section 1.924 of our rules;<sup>275</sup> or (4) require coordination with the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC).<sup>276</sup> We also proposed that the licensee should be responsible for determining whether an application for an individual station needs to be filed with the Commission.<sup>277</sup> Further we proposed that

<sup>267</sup> See 47 C.F.R. § 27.15(a); *LMDS Report and Order*, 13 FCC Rcd at 11666 ¶ 19.

<sup>268</sup> We note that our decision to allow combined partitioning and disaggregation is consistent with our approach in other services. See, e.g., *MAS Report and Order*, 15 FCC Rcd at 11991 ¶ 88; *39 GHz MO&O*, 14 FCC Rcd at 2460; *Paging Systems Third Report and Order*, 14 FCC Rcd at 10110; *PCS Order*, 11 FCC Rcd at 21866.

<sup>269</sup> See, e.g., *39 GHz Report and Order*, 12 FCC Rcd at 18635 ¶ 73.

<sup>270</sup> See 47 C.F.R. § 1.948.

<sup>271</sup> 47 C.F.R. § 1.2111(e).

<sup>272</sup> See *Service Rules Notice*, 17 FCC Rcd at 2536 ¶ 91.

<sup>273</sup> 47 C.F.R. § 1.1307.

<sup>274</sup> See, e.g., 47 C.F.R. § 1.928 (regarding frequency coordination arrangements between the U.S. and Canada).

<sup>275</sup> 47 C.F.R. § 1.924.

<sup>276</sup> We will discuss FAS coordination in the section describing coordination with Government incumbents. See discussion *infra* Section IV.E.2.

<sup>277</sup> See *Service Rules Notice*, 17 FCC Rcd at 2536 ¶ 93.

this requirement would apply to both new stations and station modifications. We sought comment on these proposals.<sup>278</sup>

87. Decision. Consistent with the flexible licensing approach we adopt herein, a geographic area licensee will be permitted to provide all permissible services anywhere within its licensed service area, pursuant to its regulatory status. Accordingly, a geographic area licensee will continue to be permitted to add, remove, or relocate individual sites within its service area without prior Commission approval. As proposed in the *Service Rules Notice*, however, we will require a licensee to comply with separate filing or authorization requirements in modifying an individual station where: (1) there is a National Environmental Policy Act (NEPA) concern pursuant to Section 1.1301 through 1.1319;<sup>279</sup> (2) there are areas where radio frequency quiet zones are in place under Section 1.924;<sup>280</sup> (3) restrictions regarding border areas under international agreement are in place;<sup>281</sup> or (4) coordination with the Frequency Assignment Subcommittee (FAS) of the Interdepartment Radio Advisory Committee (IRAC) is required. Licensees will be responsible for determining whether an addition or modification of a particular site within its geographic service area falls under this requirement.

88. We believe that our treatment of individual station licenses is consistent with the flexible licensing approach we are adopting in this proceeding. Consistent with this flexible approach, we will also permit both multiple fixed and mobile stations, such as a portion of cellular network architecture, to be handled via a single coordination process.<sup>282</sup> We therefore are adopting our procedures regarding individual station licenses as proposed in the *Service Rules Notice* for licenses assigned by geographic area in the paired 1392-1395 MHz and 1432-1435 MHz bands and in the unpaired 1390-1392 MHz, 1670-1675 MHz, and the 2385-2390 MHz bands. With regard to licensees that elect band manager status, Part 27 of our rules will continue to apply. Specifically, Section 27.601(c) requires a band manager to file a separate application with the Commission for stations that require an Environmental Assessment, require international coordination, or would affect radio frequency quiet zones.<sup>283</sup>

## 8. Frequency Coordination for Site-by-Site Applications

89. Overview. In the *Service Rules Notice*, we requested comment on whether we should require traditional land mobile frequency coordination for telemetry operating on a secondary basis in the 217-220 MHz and 1427-1429.5 MHz bands.<sup>284</sup> We proposed that in lieu of the former requirement for FAS approval, we would require traditional land mobile frequency coordination.<sup>285</sup> Under these procedures each application proposing a new telemetry operation or modifying an existing telemetry

<sup>278</sup> *Id.*

<sup>279</sup> See 47 C.F.R. §§ 1.1301-1319. We also note that Part 17 of our rules also outlines circumstances by which licensees are required to register with the Commission prior to construction of antennas. See 47 C.F.R. Part 17.

<sup>280</sup> 47 C.F.R. § 1.924.

<sup>281</sup> See *supra* note 185.

<sup>282</sup> See ArrayComm Comments at 34 (requesting that this be added to Section 1.924(f) of the rules).

<sup>283</sup> 47 C.F.R. § 27.601(c)(1).

<sup>284</sup> See *Service Rules Notice*, 17 FCC Rcd at 2526 ¶ 65. By definition, a frequency coordinator is to recommend a frequency(ies) that will most effectively meet an applicant's needs while minimizing interference to licensees already operating in a band. 47 C.F.R. § 90.7.

<sup>285</sup> *Id.*

operation would be required to include a showing of frequency coordination.<sup>286</sup> Coordination would be conducted pursuant to Section 90.175 of the Commission's Rules.<sup>287</sup>

90. *217-220 MHz.* Most commenters support frequency coordination with regard to the licensing of secondary telemetry in the 217-220 MHz band.<sup>288</sup> Only one commenter, Fairfield, opposes traditional land mobile frequency coordination for secondary telemetry in the 217-220 MHz.<sup>289</sup> Contrary to Fairfield's position, we believe that frequency coordination is warranted for secondary users because FAS coordination for services operating in this band is being phased out. We agree with the majority of those commenters, such as UTC, that frequency coordination would facilitate the efficient and rapid processing of applications by avoiding harmful interference between secondary users in a scarce and highly congested band.<sup>290</sup> Accordingly, we will require applicants to include a showing of frequency coordination for any application proposing a new telemetry operation or modifying an existing telemetry operation.<sup>291</sup> Frequency coordination for secondary telemetry in the 217-220 MHz band will be conducted in accordance with Section 90.175 of our rules.<sup>292</sup> Frequencies will be available only on a shared basis.<sup>293</sup> The frequency coordinator will be required to select the most appropriate frequency.<sup>294</sup> All authorized frequency coordinators under Part 90 of our rules will be eligible to coordinate secondary telemetry in the 217-220 MHz band.

91. Fairfield believes that frequency coordination would not be appropriate for geophysical telemetry operations.<sup>295</sup> Fairfield states that geophysical telemetry operations are too remote, too sensitive and too benign to impose the transaction costs associated with frequency coordination.<sup>296</sup> As support, Fairfield states that the Commission eschewed frequency coordination for geophysical telemetry in the 220-222 MHz service.<sup>297</sup> We believe that Fairfield's argument is misplaced. Unlike operations in the 220-222 MHz band, several entities currently utilize telemetry on a secondary basis in the 217-220 MHz band.<sup>298</sup> Consequently, we believe that for frequency coordination to be effective throughout the band, all forms of secondary telemetry, including geophysical telemetry, must be subject to the same coordination process. Because of the scarcity of spectrum in relation to the high demand and existing use of the 217-220 MHz band, we will require all secondary telemetry users operating throughout the 217-220 MHz band, to have acquired frequency coordination as a condition precedent to our acceptance of any application for filing.

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<sup>286</sup> *Id.*

<sup>287</sup> 47 C.F.R. § 90.175.

<sup>288</sup> See DataFlow Comments at 6, Watchman Comments at 3, UTC Comments at 10.

<sup>289</sup> Fairfield Comments at 11.

<sup>290</sup> See UTC Comments at 10.

<sup>291</sup> 47 C.F.R. § 1.929.

<sup>292</sup> 47 C.F.R. § 90.175.

<sup>293</sup> Frequencies will be assigned on a shared basis and will not be assigned for the exclusive use of any licensee. 47 C.F.R. § 90.173(a).

<sup>294</sup> 47 C.F.R. § 90.175(b)(1).

<sup>295</sup> Fairfield Comments at 11. Geophysical telemetry is telemetry involving the simultaneous transmissions of seismic data from numerous locations to a central receiver and digital recording unit. 47 C.F.R. § 90.7.

<sup>296</sup> *Id.*

<sup>297</sup> *Id.*

<sup>298</sup> See comments by DataFlow, Watchman and UTC.

92. Mobex and Paging Systems states that if fixed secondary telemetry is allowed to operate in the band, then fixed secondary telemetry should be held to the same coordination procedures that apply to amateur operators under Section 97.303(e) of our rules.<sup>299</sup> Under Section 97.303(e)(5), no amateur operator may transmit in the 219-220 MHz frequency band from a location within 80 kilometers of an AMTS coast station unless the amateur operator holds written approval from the AMTS licensee.<sup>300</sup> Further, under Section 97.303(e)(4), no amateur operator may transmit in the 219-220 MHz frequency segment from a location within 640 kilometers of an AMTS coast station unless the amateur operator has provided the AMTS licensee with written notification.<sup>301</sup>

93. DataFlow believes the provisions of Section 97.303(e) are not appropriate for secondary telemetry because secondary telemetry operates at a low power and is readily identifiable unlike amateur operations, which operate ubiquitously and at relatively higher power levels compared to secondary telemetry operations.<sup>302</sup> We do not believe that Section 97.303(e) should apply to secondary telemetry. Unlike amateur operations in the band, secondary telemetry in the 217-220 MHz band will be licensed on a site-by-site basis. Thus, primary licensees will be able to determine the source of any interference from secondary users by referring to our ULS database. In light of these distinctions, we believe that a notification procedure for secondary telemetry would not be necessary. We therefore decline to adopt notification procedures for secondary telemetry operations in the 217-220 MHz band.

94. *1.4 GHz Band.* We proposed traditional land mobile radio frequency coordination for secondary telemetry uses in the 1427-1429.5 MHz band.<sup>303</sup> We did not, however, propose traditional land mobile radio frequency coordination for primary telemetry uses in the 1429.5-1432 MHz band. Based on the record before us, we now believe that frequency coordination is appropriate for both secondary and primary telemetry in these bands. Frequency coordination under Part 90 of our Rules will expedite the application process by preventing applicants from seeking frequencies in locations where they are unavailable due to their use by others.<sup>304</sup> We also believe that frequency coordination will further minimize, if not eliminate, the potential of interference to WMTS from telemetry operations.<sup>305</sup>

95. In addition, we are adopting technical restrictions on telemetry operations in this band designed to further minimize the possibility of harmful interference to WMTS operations.<sup>306</sup> To effectively implement these restrictions, we will require frequency coordinators to recommend the best available frequency as well as the most appropriate operating power necessary to avoid causing harmful interference to WMTS.<sup>307</sup> If mobile telemetry is desired, the frequency coordinator will also be responsible for recommending the most appropriate mobile area of operation. We believe that this task would most effectively and efficiently be performed by a frequency coordinator rather than individual applicants.

<sup>299</sup> Mobex Comments at 3, Paging Systems Comments at 4. See also 47 C.F.R. § 97.303(e).

<sup>300</sup> 47 C.F.R. § 97.303(e)(5).

<sup>301</sup> 47 C.F.R. § 97.303(e)(4).

<sup>302</sup> DataFlow Comments at 5.

<sup>303</sup> See *Service Rules Notice*, 17 FCC Rcd at 2526 ¶ 65.

<sup>304</sup> See Itron Comments at 8.

<sup>305</sup> See, e.g., UTC Comments at 9-10 (citing the unique co-channel and adjacent channel operation in this band).

<sup>306</sup> See discussion *infra* Section IV.F.2.b.

<sup>307</sup> The frequency coordinators recommendation must satisfy the limits detailed in a following section discussing field strength limit for telemetry. See discussion *infra* Section IV.F.2.b.iii.

96. Frequency coordination will be particularly important for telemetry operations near the edge of the seven geographic "carve-out" areas.<sup>308</sup> Because of the "band flip," primary telemetry located outside the seven geographic "carve-out" areas will operate co-channel to primary WMTS operations within the geographic "carve-out" areas.<sup>309</sup> Consequently, we will require applicants to include evidence of frequency coordination for any application proposing a new telemetry operation or modifying an existing telemetry operation in the 1427-1429.5 MHz and 1429.5-1432 MHz bands.<sup>310</sup> In this connection, we will add a provision to Section 90.175 of our rules for this frequency coordination.<sup>311</sup> Telemetry frequencies in the 1427-1429.5 MHz and 1429.5-1432 MHz bands will be available only on a shared basis.<sup>312</sup> Therefore, the frequency coordinator will be required to select the most appropriate frequency. Because of the concerns regarding interference to WMTS, frequency coordinators will also be required to recommend the most appropriate operating power and area of operation. All authorized frequency coordinators under Part 90 of our rules will be eligible to coordinate secondary and primary telemetry in the 1427-1429.5 MHz and 1429.5-1432 MHz bands.

97. Finally, Itron and AHA support information exchange between Part 90 frequency coordinators and the WMTS frequency coordinator the American Society of Healthcare Engineers (ASHE).<sup>313</sup> AHA states that ASHE must be made aware of all primary and secondary telemetry operations in the 1427-1429.5 MHz and 1429.5-1432 MHz bands.<sup>314</sup> We agree with Itron and AHA that an exchange of information between the Part 90 frequency coordinators and the WMTS frequency coordinator will be needed to minimize the possibility of harmful interference to WMTS. Therefore, we will require that within one business day of making a frequency recommendation for telemetry operations in the 1427-1432 MHz band, each Part 90 frequency coordinator must notify and provide technical information regarding the proposed telemetry operation to ASHE.<sup>315</sup> We believe that this requirement can be seamlessly incorporated into the procedures which the Part 90 frequency coordinators generally follow for exchanging information on frequency recommendations.<sup>316</sup>

98. With regard to the initial deployment of WMTS equipment to be operated at any healthcare facility in the 1427-1432 MHz band, we will require ASHE to notify all Part 90 telemetry licensees potentially affected by the deployment of WMTS equipment at a given facility.<sup>317</sup> Under this prior notification approach, Part 90 telemetry licensees will need to determine whether their existing telemetry system needs to alter its operating parameters in order to comply with the technical

<sup>308</sup> See discussion *supra* Section IV.A.3.c.

<sup>309</sup> Outside the "carve-out" areas telemetry will be primary in the 1429.5-1432 MHz band. Inside the "carve-out" areas, WMTS will be primary in the 1429-1431.5 MHz band.

<sup>310</sup> 47 C.F.R. § 1.929.

<sup>311</sup> 47 C.F.R. § 90.175.

<sup>312</sup> See *supra* note 293.

<sup>313</sup> Itron Comments at 8; AHA Comments at 7.

<sup>314</sup> AHA Comments at 7.

<sup>315</sup> The information ASHE receives via notification from the Part 90 frequency coordinator will also be used to supplement ASHE's database for future coordination purposes with affected Part 90 licensees, as necessary.

<sup>316</sup> Frequency coordinators are generally required, within one business day of making a frequency recommendation, to notify all other frequency coordinators who are certified to coordinate that frequency. 47 C.F.R. §§ 90.176(a), (b).

<sup>317</sup> Because proper notification is a crucial element to the integrity of our licensing approach here, we strongly recommend that ASHE avail itself to the information contained in our ULS as a matter of course in the exercise of its due diligence.

requirements we are adopting here to avoid causing harmful interference to the facility employing WMTS equipment.<sup>318</sup>

### C. Competitive Bidding Procedures

99. Because we have adopted a licensing scheme under which mutually exclusive applications may be filed for licenses for the unpaired 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands, and the paired 1392-1395 MHz and 1432-1435 MHz bands, such applications must be resolved by competitive bidding.<sup>319</sup>

#### 1. Incorporation by Reference of the Part 1 Standardized Auction Rules

100. *Background.* In the *Part 1 Third Report and Order*, the Commission streamlined its auction procedures by adopting general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's rules applicable to all auctionable services.<sup>320</sup> In the *Service Rules Notice*, we proposed that if we adopted a licensing scheme that permitted the filing of mutually exclusive applications we would conduct the auction of initial licenses in the unpaired 1390-1392 MHz, 1427-1432 MHz,<sup>321</sup> 1670-1675 MHz, and 2385-2390 MHz bands, and the paired 1392-1395 MHz and 1432-1435 MHz bands in conformity with the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's rules, and substantially consistent with the bidding procedures that have been employed in previous auctions.<sup>322</sup> Specifically, we proposed to employ the Part 1 rules governing competitive bidding design, designated entities, application and payment procedures, reporting requirements, collusion issues, and unjust enrichment.<sup>323</sup> In addition, consistent with current practice, we proposed that matters such as the appropriate competitive bidding design for the auction of these licenses, as well as minimum opening bids and reserve prices, would be determined by the Wireless Telecommunications Bureau (Bureau) pursuant to its delegated authority.<sup>324</sup> We also sought comment on whether any of our Part 1 rules or other auction procedures would be inappropriate in an auction of licenses in these bands.<sup>325</sup>

<sup>318</sup> See discussion *infra* Section IV.F.2.b.iii.

<sup>319</sup> 47 U.S.C. § 309(j).

<sup>320</sup> Amendment of Part 1 of the Commission's Rules — Competitive Bidding Procedures, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374 (1997) (modified by Erratum, DA 98-419 (rel. March 2, 1998)) (*Part 1 Third Report and Order*). The Commission clarified and amended these general competitive bidding procedures. Amendment of Part 1 of the Commission's Rules — Competitive Bidding Procedures, *Order on Reconsideration of the Third Report and Order, Fifth Report and Order, and Fourth Further Notice of Proposed Rule Making*, WT Docket 97-82, 15 FCC Rcd 15293 (2000) (modified by Erratum, DA 00-2475 (rel. Nov. 3, 2000)) (*Part 1 Order on Reconsideration, Fifth Report and Order, and Fourth FNPRM*) (recons. pending).

<sup>321</sup> This proposal applied to initial licenses for primary telemetry services in the 1429.5-1432 MHz band as well as initial licenses for primary telemetry services in the seven geographic "carve-out" areas in the 1427-1429.5 MHz band. *Service Rules Notice*, 17 FCC Rcd at 2549 n.314.

<sup>322</sup> *Id.* at 2549 ¶ 141.

<sup>323</sup> See 47 C.F.R. Section 1.2101 *et. seq.*

<sup>324</sup> See *Part 1 Third Report and Order*, 13 FCC Rcd 374, 448-49, 454-55 ¶¶ 125, 139 (directing the Bureau to seek comment on specific mechanisms relating to auction conduct pursuant to the Balanced Budget Act).

<sup>325</sup> *Service Rules Notice*, 17 FCC Rcd at 2549 ¶ 141.

101. We received only one comment on our proposal to use the Part 1 competitive bidding rules. Data Flow endorses the use of the general competitive bidding rules set forth in Part 1 to resolve mutually exclusive applications for the 216-220 MHz band.<sup>326</sup>

102. *Discussion.* We adopt our proposal to conduct the auction of initial licenses in the unpaired 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands, and the paired 1392-1395 MHz and 1432-1435 MHz bands in conformity with the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's rules. We believe that this decision will increase the efficiency of the competitive bidding process and will provide specific guidance to auction participants.<sup>327</sup> Application of the Part 1 rules will be subject to any modifications that the Commission may subsequently adopt.<sup>328</sup> As we have indicated above, due to band-related interference issues we have decided to employ a site-by-site licensing scheme with the use of a frequency coordinator for licenses in the 1427-1432 MHz band, which avoids the filing of mutually exclusive license applications.<sup>329</sup> Thus, we will not adopt our proposal to apply the Part 1 competitive bidding rules for that band.

## 2. Provisions for Designated Entities<sup>330</sup>

103. *Background.* In the *Service Rules Notice*, we proposed to adopt two small business size standards for the unpaired 1390-1392 MHz, 1670-1675 MHz, and 2385-2390 MHz bands, and the paired 1392-1395 MHz and 1432-1435 MHz bands that were consistent with the tiered size standards that we have used in the Wireless Communications Service (WCS) 2.3 GHz band and the 700 MHz Guard Bands.<sup>331</sup> We proposed a small business size standard for entities with average annual gross revenues not exceeding \$40 million for the three preceding years, as well as a separate small business size standard for

<sup>326</sup> Data Flow Comments at 7. As noted previously, this proceeding does not adopt rules governing the regulatory framework or service rules in the 216-220 MHz band. See *supra* ¶¶ 5, 55 and note 28.

<sup>327</sup> The Commission has previously observed that "our general competitive bidding rules are intended to streamline our regulations and eliminate unnecessary rules wherever possible, increase the efficiency of the competitive bidding process, and provide more specific guidance to auction participants." *Part 1 Third Report and Order*, 13 FCC Rcd at 376 ¶ 1 (1997). Further, continual changes and improvements "advance our auction program by reducing the burden on the Commission and the public of conducting service-by-service auction rule makings." *Id.*

<sup>328</sup> In the Part 1 proceeding, the Commission has engaged in an on-going effort to clarify and amend its general competitive bidding rules for all auctionable services. See *Part 1 Order on Reconsideration, Fifth Report and Order, and Fourth FNPRM*, 15 FCC Rcd at 15294, ¶¶ 1-2. The Commission recently amended its prohibition on collusion in competitive bidding, which is found in Section 1.2105(c) of the Commission's rules. Amendment of Part 1 of the Commission's Rules — Competitive Bidding Procedures, *Seventh Report and Order*, WT Docket 97-82, 16 FCC Rcd 17546 (2001). In addition, the Commission recently amended its competitive bidding attribution rule, which is found in Section 1.2110(c) of the Commission's rules. Amendment of Part 1 of the Commission's Rules — Competitive Bidding Procedures, *Eighth Report and Order*, WT Docket 97-82, FCC 02-34 (rel. Feb. 13, 2002). Under delegated authority, the Wireless Telecommunications Bureau recently made conforming edits to service-specific competitive bidding rules and portions of the Part 1 general competitive bidding rules. Amendment of Parts 1, 21, 22, 24, 25, 26, 27, 73, 74, 80, 90, 95, 100, and 101 of the Commission Rules — Competitive Bidding, *Order*, DA 02-847 (rel. April 11, 2002).

<sup>329</sup> See discussion *supra* at ¶ 49.

<sup>330</sup> We have coordinated the adopted special small business size standards, see *infra*, with the U.S. Small Business Administration.

<sup>331</sup> *Service Rules Notice*, 17 FCC Rcd at 2550-2551 ¶¶ 144-146. See Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), GN Docket No. 96-228, *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997); Service Rules for the 746-764 and 776-794 MHz Bands and Revisions to Part 27 of the Commission's Rules, *Second Report and Order*, WT Docket No. 99-168, 15 FCC Rcd 5299, 5343-5345 ¶¶ 106-110 (2000).